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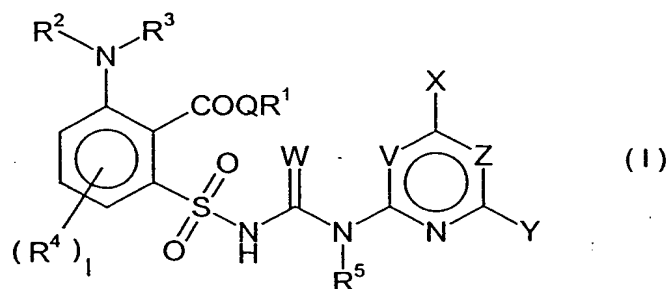
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Patent claims:

1. A compound of the formula (I) or a salt thereof



in which

10 R^1 is a hydrogen atom, a hydrocarbon radical or a heterocyclyl radical, where each of the two last-mentioned radicals is unsubstituted or substituted and, including substituents, has from 1 to 30 carbon atoms,

R^2 is a group of the formula R^0-Q^0 - in which

15 R^0 is a hydrogen atom, a hydrocarbon radical or a heterocyclyl radical, where each of the two last-mentioned radicals is unsubstituted or substituted and, including substituents, has from 1 to 30 carbon atoms, and Q^0 is a direct bond or a divalent group of the formula $-O-$ or $-N(R^\#)-$, where $R^\#$ is a hydrogen atom, an acyl radical or a hydrocarbon radical and where the last-mentioned radical is unsubstituted or substituted and, including substituents, has from 1 to 30 carbon atoms,

20 R^3 is a hydrogen atom, a hydrocarbon radical or a heterocyclyl radical, where each of the two last-mentioned radicals is unsubstituted or substituted and, including substituents, has from 1 to 30 carbon atoms,

25 R^4 independently of one another, are halogen, OH, SH, a nitrogen-containing radical which does not contain any carbon or a carbon-containing radical which has from 1 to 30 carbon atoms,

- I is 0, 1, 2 or 3, preferably 0 or 1,
- R⁵ is a hydrogen atom or a hydrocarbon radical which is unsubstituted or substituted and, including substituents, has from 1 to 20 carbon atoms,
- Q is Θ , S or NR*,
- 5 R* is a hydrogen atom or a hydrocarbon radical which is unsubstituted or substituted and, including substituents, has from 1 to 20 carbon atoms,
- W is an oxygen or sulfur atom,
- X, Y independently of one another are a hydrogen atom, halogen, (C₁-C₄)alkyl, (C₁-C₄)alkoxy, (C₁-C₄)alkylthio, where each of the 3 last-mentioned radicals
- 10 is unsubstituted or substituted by one or more radicals selected from the group consisting of halogen, (C₁-C₄)alkoxy and (C₁-C₄)alkylthio, or are mono- or di[(C₁-C₄)alkyl]amino, (C₂-C₆)alkenyl, (C₂-C₆)alkynyl, (C₃-C₆)alkenyloxy or (C₃-C₆)alkynyloxy, and
- V, Z independently of one another are CH or N.
- 15
2. A compound of the formula (I) or a salt thereof as claimed in claim 1 in which
- R¹ is H, (C₁-C₆)alkyl, (C₃-C₆)alkenyl, (C₃-C₆)alkynyl, where each of the three last-mentioned radicals is unsubstituted or substituted by one or more radicals selected from the group consisting of halogen, unsubstituted and substituted
- 20 phenyl, unsubstituted and substituted heterocyclyl having 3 to 6 ring atoms, unsubstituted and substituted (C₃-C₆)cycloalkyl, (C₁-C₄)alkoxy, (C₁-C₄)alkylthio, [(C₁-C₄)alkoxy]carbonyl and [(C₁-C₄)haloalkoxy]carbonyl, or is unsubstituted or substituted (C₃-C₆)cycloalkyl, substituted or unsubstituted (C₃-C₆)cycloalkenyl, unsubstituted or substituted phenyl, unsubstituted or
- 25 substituted heterocyclyl having 3 to 6 ring atoms, where substituted phenyl, substituted heterocyclyl, substituted cycloalkyl or substituted cycloalkenyl carry, as substituents, one or more radicals selected from the group consisting of halogen, (C₁-C₄)alkyl, (C₁-C₄)haloalkyl,

(C₁-C₄)alkoxy, (C₁-C₄)alkyl, di[(C₁-C₄)alkoxy](C₁-C₄)alkyl,
 (C₁-C₄)haloalkoxy, (C₁-C₄)alkylthio, (C₁-C₄)alkylsulfinyl,
 (C₁-C₄)haloalkylsulfinyl, (C₁-C₄)alkylsulfonyl, (C₁-C₄)haloalkylsulfonyl,
 NR⁸R⁹, [(C₁-C₄)alkoxy]carbonyl, [(C₁-C₄)haloalkoxy]carbonyl,

5 [(C₁-C₄)alkyl]carbonyl, OH, phenyl, CN and NO₂ and

R² is a group of the formula R⁰-Q⁰-,

in which R⁰ is a hydrogen atom, (C₁-C₁₂)alkyl, (C₂-C₁₂)alkenyl or
 (C₂-C₁₂)alkynyl, where each the three last-mentioned radicals is

unsubstituted or substituted by one or more radicals selected from the group

10 consisting of halogen, (C₁-C₆)alkoxy, (C₁-C₆)haloalkoxy, (C₁-C₆)alkylthio,

(C₁-C₆)haloalkylthio, (C₁-C₆)alkylsulfinyl, (C₁-C₆)haloalkylsulfinyl,

(C₁-C₆)alkylsulfonyl, (C₁-C₆)haloalkylsulfonyl, [(C₁-C₆)alkoxy]carbonyl,

[(C₁-C₆)haloalkoxy]carbonyl, CONR⁶R⁷, SO₂NR⁶R⁷, CN, OH, SH,

(C₃-C₆)cycloalkyl, NR⁸R⁹, unsubstituted or substituted phenyl, unsubstituted

15 or substituted heterocyclyl, or

is (C₃-C₆)cycloalkyl, (C₃-C₆)cycloalkenyl, phenyl or heterocyclyl, preferably

having 3 to 6 ring atoms, where the four last-mentioned radicals may be

unsubstituted or substituted, and

in which Q⁰ is a direct bond or a divalent group of the formula -O- or -N(R[#])-

20 where R[#] is a hydrogen atom, an acyl radical or (C₁-C₁₂)alkyl,

(C₂-C₁₂)alkenyl or (C₂-C₁₂)alkynyl, where each of the 3 last-mentioned

radicals is unsubstituted or substituted by one or more radicals selected from

the group consisting of halogen, (C₁-C₆)alkoxy, (C₁-C₆)haloalkoxy,

(C₁-C₆)alkylthio, (C₁-C₆)haloalkylthio, CN, OH, (C₃-C₆)cycloalkyl,

25 unsubstituted or substituted phenyl, unsubstituted or substituted heterocyclyl,

or is unsubstituted or substituted (C₃-C₆)cycloalkyl, unsubstituted or substituted (C₃-C₆)cycloalkenyl or unsubstituted or substituted phenyl, and R⁰ and R[#] together with the nitrogen atom of the NR[#]R⁰ group may form a heterocyclyl radical, preferably having 3 to 6 ring atoms, which is unsubstituted or substituted, preferably by one or more radicals selected from the group consisting of halogen, (C₁-C₆)alkyl, (C₁-C₆)alkoxy, [(C₁-C₆)alkoxy]carbonyl, (C₁-C₆)haloalkyl and oxo, R³ is a hydrogen atom, (C₁-C₁₂)alkyl, (C₂-C₁₂)alkenyl or (C₂-C₁₂)alkynyl, where each of the 3 last-mentioned radicals is unsubstituted or substituted by one or more radicals selected from the group consisting of halogen, (C₁-C₆)alkoxy, (C₁-C₆)haloalkoxy, (C₁-C₆)alkylthio, (C₁-C₆)haloalkylthio, (C₁-C₆)alkylsulfinyl, (C₁-C₆)haloalkylsulfinyl, (C₁-C₆)alkylsulfonyl, (C₁-C₆)haloalkylsulfonyl, [(C₁-C₆)alkoxy]carbonyl, [(C₁-C₆)haloalkoxy]carbonyl, CONR⁶R⁷, SO₂NR⁶R⁷, CN, OH, (C₃-C₆)cycloalkyl, NR⁸R⁹, unsubstituted or substituted phenyl, unsubstituted or substituted heterocyclyl, or is unsubstituted or substituted (C₃-C₆)cycloalkyl, unsubstituted or substituted (C₃-C₆)cycloalkenyl, unsubstituted or substituted heterocyclyl, preferably having 3 to 6 ring atoms, or unsubstituted or substituted phenyl, and R² and R³ together with the nitrogen atom of the NR²R³ group (N¹) may form a heterocyclyl radical, preferably having 3 to 6 ring atoms, which is unsubstituted or substituted, preferably by one or more radicals selected from the group consisting of halogen, (C₁-C₆)alkyl, (C₁-C₆)alkoxy, [(C₁-C₆)alkoxy]carbonyl, (C₁-C₆)haloalkyl and oxo, where the oxo radical is preferably not adjacent to the nitrogen atom (N¹), and

R^4 independently of one another are halogen, CN, (C₁-C₄)alkyl, (C₁-C₄)alkoxy, (C₂-C₆)alkenyl, (C₂-C₆)alkynyl, (C₃-C₆)alkenyloxy, (C₃-C₆)alkynyloxy, where each of the 6 last-mentioned radicals is unsubstituted or substituted by one or more radicals selected from the group consisting of halogen, (C₁-C₆)alkoxy, (C₁-C₆)haloalkoxy, (C₁-C₆)alkylthio, (C₁-C₆)haloalkylthio, (C₁-C₆)alkylsulfinyl, (C₁-C₆)haloalkylsulfinyl, (C₁-C₆)alkylsulfonyl, (C₁-C₆)haloalkylsulfonyl, [(C₁-C₆)alkoxy]carbonyl, [(C₁-C₆)haloalkoxy]carbonyl, CONR⁶R⁷, SO₂NR⁶R⁷, CN, OH, (C₃-C₆)cycloalkyl, NR⁸R⁹, unsubstituted or substituted phenyl or unsubstituted or substituted heterocyclyl, or is unsubstituted or substituted (C₃-C₆)cycloalkyl, unsubstituted or substituted (C₃-C₆)cycloalkenyl, unsubstituted or substituted heterocyclyl, preferably having 3 to 6 ring atoms, unsubstituted or substituted phenyl, [(C₁-C₄)alkyl]carbonyl or [(C₁-C₄)alkoxy]carbonyl, where each of the two last-mentioned radicals is unsubstituted or substituted in the alkyl moiety by one or more halogen atoms, or is a radical of the formula C(O)-NR'-R'', C(S)-NR'-R'', CR'=N-Q¹-R'', S(O)_m-Q¹-R''', P(O)_n(-Q¹-R'''Q²-R''), NR'-Q¹-R'' or NR'''-N=CR'-R'', where R', R'' and R''' independently of one another are a hydrogen atom, an acyl radical or an unsubstituted or substituted (C₁-C₁₀)hydrocarbon radical, R''' is a carbon-containing acyl radical or an unsubstituted or substituted (C₁-C₁₀)hydrocarbon radical, and Q¹ and Q² independently of one another are a direct bond or a divalent group of the formula -O- or -N(R⁺)-, where R⁺ is a hydrogen atom, an acyl radical, or an unsubstituted or substituted (C₁-C₁₀)hydrocarbon radical, and m = 0, 1, 2 or 3, and n = 0, 1 or 2, and R' together with R'', R⁺ together with R', R⁺ together with R'' or R⁺ together with R''' may in each case form a heterocyclyl radical, preferably having 3 to 6 ring atoms,

which is unsubstituted or substituted, preferably by one or more radicals selected from the group consisting of halogen, (C₁-C₆)alkyl, (C₁-C₆)alkoxy, [(C₁-C₆)alkoxy]carbonyl, (C₁-C₆)haloalkyl and oxo,

I is 0, 1 or 2, preferably 0 or 1,

5 R⁵ is H or (C₁-C₄)alkyl which is unsubstituted or substituted,

R⁶ and R⁷ independently of one another are H, (C₁-C₆)alkyl, (C₃-C₆)alkenyl,

(C₃-C₆)alkynyl, unsubstituted or substituted phenyl or unsubstituted or substituted heterocyclyl or

10 R⁶ and R⁷ together with the nitrogen atom of the NR⁶R⁷ group may form a heterocyclyl radical having 5 or 6 ring atoms which may optionally contain one or more additional heteroatoms selected from the group consisting of N, O and S and which is unsubstituted or mono- or polysubstituted by radicals selected from the group consisting of (C₁-C₄)alkyl and oxo, and

R⁸ and R⁹ independently of one another are (C₁-C₄)alkylcarbonyl,

15 (C₁-C₄)haloalkylcarbonyl, (C₁-C₄)alkoxycarbonyl or (C₁-C₄)alkylsulfonyl or together with the nitrogen atom, of the NR⁸R⁹ group may form a heterocyclyl radical having 5 or 6 ring atoms which may optionally contain one or more additional heteroatoms selected from the group consisting of N, O and S and which is unsubstituted or mono- or polysubstituted by radicals selected from the group consisting of (C₁-C₄)alkyl and oxo, and

20 Q is O, S or NR*,

R* is (C₁-C₄)alkyl, (C₃-C₄)alkenyl or (C₃-C₄)alkynyl, where each of the three last-mentioned radicals is unsubstituted or substituted by one or more radicals selected from the group consisting of halogen, (C₁-C₄)alkoxy and

25 (C₁-C₄)alkylthio, and

R* and R¹ together with the nitrogen atom of the NR*R¹ group may form a heterocyclyl radical which is unsubstituted or substituted, preferably by one or

more radicals selected from the group consisting of halogen, (C₁-C₆)alkyl, (C₁-C₆)alkoxy, [(C₁-C₆)alkoxy]carbonyl, (C₁-C₆)haloalkyl and oxo,

X, Y independently of one another are H, halogen, (C₁-C₄)alkyl, (C₁-C₄)alkoxy, (C₁-C₄)alkylthio, where each of the three last-mentioned radicals is

unsubstituted or substituted by one or more radicals from the group consisting of halogen, (C₁-C₄)alkoxy and (C₁-C₄)alkylthio, are mono- or

di[(C₁-C₄)alkyl]amino, (C₃-C₅)alkenyl, (C₃-C₅)alkenyloxy, (C₃-C₅)alkynyl or (C₃-C₅)alkynyloxy, and

where the radicals R¹, R², R³ and R⁴, including substituents, have up to 20 carbon atoms.

3. A compound of the formula (I) or a salt thereof as claimed in claim 1 in which R¹ is H, (C₁-C₆)alkyl, (C₃-C₆)alkenyl or (C₃-C₆)alkynyl, where each of the three last-mentioned radicals is unsubstituted or substituted by one or more radicals selected from the group consisting of halogen, phenyl, (C₁-C₄)alkoxy, (C₁-C₄)alkylthio, (C₃-C₆)cycloalkyl, heterocyclyl having 3 to 6 ring atoms and [(C₁-C₄)alkoxy]carbonyl, or is (C₃-C₆)cycloalkyl or heterocyclyl having 3 to 6 ring atoms, where each of the two last-mentioned radicals is unsubstituted or substituted by one or more radicals selected from the group consisting of halogen, (C₁-C₄)alkyl and (C₁-C₄)alkoxy,

R² is a group of the formula R⁰-Q⁰ - in which

R⁰ is a hydrogen atom, (C₁-C₈)alkyl, (C₃-C₈)alkenyl or (C₃-C₈)alkynyl, where each of the 3 last-mentioned radicals is unsubstituted or substituted by one or more radicals selected from the group consisting of halogen, (C₁-C₄)alkoxy, (C₁-C₄)haloalkoxy, (C₁-C₄)alkylthio, (C₁-C₄)haloalkylthio, (C₁-C₄)alkylsulfinyl, (C₁-C₄)haloalkylsulfinyl, (C₁-C₄)alkylsulfonyl,

(C₁-C₄)haloalkylsulfonyl, [(C₁-C₆)alkoxy]carbonyl, CONR⁶R⁷, SO₂NR⁶R⁷,
 CN, OH, (C₃-C₆)cycloalkyl, NR⁸R⁹ and phenyl which is unsubstituted or
 substituted by one or more radicals selected from the group consisting of
 halogen, (C₁-C₄)alkyl, (C₁-C₄)haloalkyl, (C₁-C₄)alkoxy, (C₁-C₄)haloalkoxy,
 5 (C₁-C₄)alkylthio, (C₁-C₄)alkylsulfinyl, (C₁-C₄)alkylsulfonyl, NR⁸R⁹,
 [(C₁-C₄)alkoxy]carbonyl, [(C₁-C₄)alkyl]carbonyl, phenyl,
 [(C₁-C₄)alkyl]carbonyl, CN and NO₂, or

is heterocyclyl having 3 to 6 ring atoms which is unsubstituted or substituted
 by one or more radicals selected from the group consisting of halogen,

10 (C₁-C₄)alkyl, (C₁-C₄)haloalkyl, (C₁-C₄)alkoxy, (C₁-C₄)haloalkoxy,
 (C₁-C₄)alkylthio, (C₁-C₄)alkylsulfinyl, (C₁-C₄)alkylsulfonyl, NR⁸R⁹,
 [(C₁-C₄)alkoxy]carbonyl, [(C₁-C₄)alkyl]carbonyl, phenyl, CN and NO₂, or

is (C₃-C₆)cycloalkyl which is unsubstituted or substituted by one or more
 radicals selected from the group consisting of halogen, (C₁-C₄)alkyl,

15 (C₁-C₄)haloalkyl, (C₁-C₄)alkoxy, (C₁-C₄)haloalkoxy, [(C₁-C₄)alkoxy]carbonyl,
 CN, OH and phenyl, or

is (C₃-C₆)cycloalkenyl which is unsubstituted or substituted by one or more
 radicals selected from the group consisting of halogen, (C₁-C₄)alkyl,

(C₁-C₄)haloalkyl, (C₁-C₄)alkoxy and [(C₁-C₄)alkoxy]carbonyl, or

20 is phenyl which is unsubstituted or substituted by one or more radicals
 selected from the group consisting of halogen, (C₁-C₄)alkyl, (C₁-C₄)haloalkyl,
 (C₁-C₄)alkoxy, (C₁-C₄)haloalkoxy, (C₁-C₄)alkylthio, (C₁-C₄)alkylsulfinyl,
 (C₁-C₄)alkylsulfonyl, NR⁸R⁹, [(C₁-C₄)alkoxy]carbonyl, [(C₁-C₄)alkyl]carbonyl,
 phenyl, CN and NO₂, and

25 Q⁰ is a direct bond or a divalent group of the formula -O- or -NR[#], in which R[#]
 is a hydrogen atom or unsubstituted or substituted (C₁-C₄)alkyl,

R^3 is a hydrogen atom, (C₁-C₈)alkyl, (C₃-C₈)alkenyl or (C₃-C₈)alkynyl, where each of the 3 last-mentioned radicals is unsubstituted or substituted by one or more radicals selected from the group consisting of halogen, (C₁-C₄)alkoxy, (C₁-C₄)haloalkoxy, (C₁-C₄)alkylthio, (C₁-C₄)haloalkylthio, (C₁-C₄)alkylsulfinyl, (C₁-C₄)haloalkylsulfinyl, (C₁-C₄)alkylsulfonyl, (C₁-C₄)haloalkylsulfonyl, [(C₁-C₆)alkoxy]carbonyl, CONR⁶R⁷, SO₂NR⁶R⁷, CN, OH, (C₃-C₆)cycloalkyl, NR⁸R⁹ and phenyl which is unsubstituted or substituted by one or more radicals selected from the group consisting of halogen, (C₁-C₄)alkyl, (C₁-C₄)haloalkyl, (C₁-C₄)alkoxy, (C₁-C₄)haloalkoxy, (C₁-C₄)alkylthio, (C₁-C₄)alkylsulfinyl, (C₁-C₄)alkylsulfonyl, NR⁸R⁹, [(C₁-C₄)alkoxy]carbonyl, [(C₁-C₄)alkyl]carbonyl, phenyl, [(C₁-C₄)alkyl]carbonyl, CN and NO₂, or is heterocyclyl preferably having 3 to 6 ring atoms which is unsubstituted or substituted by one or more radicals selected from the group consisting of halogen, (C₁-C₄)alkyl, (C₁-C₄)haloalkyl, (C₁-C₄)alkoxy, (C₁-C₄)haloalkoxy, (C₁-C₄)alkylthio, (C₁-C₄)alkylsulfinyl, (C₁-C₄)alkylsulfonyl, NR⁸R⁹, [(C₁-C₄)alkoxy]carbonyl, [(C₁-C₄)alkyl]carbonyl, phenyl, CN and NO₂, or is (C₃-C₆)cycloalkyl which is unsubstituted or substituted by one or more radicals selected from the group consisting of halogen, (C₁-C₄)alkyl, (C₁-C₄)haloalkyl, (C₁-C₄)alkoxy, (C₁-C₄)haloalkoxy, [(C₁-C₄)alkoxy]carbonyl, CN, OH and phenyl, or is (C₃-C₆)cycloalkenyl which is unsubstituted or substituted by one or more radicals selected from the group consisting of halogen, (C₁-C₄)alkyl, (C₁-C₄)haloalkyl, (C₁-C₄)alkoxy and [(C₁-C₄)alkoxy]carbonyl, or is phenyl which is unsubstituted or substituted by one or more radicals selected from the group consisting of halogen, (C₁-C₄)alkyl, (C₁-C₄)haloalkyl, (C₁-C₄)alkoxy, (C₁-C₄)haloalkoxy, (C₁-C₄)alkylthio, (C₁-C₄)alkylsulfinyl,

(C₁-C₄)alkylsulfonyl, NR⁸R⁹, [(C₁-C₄)alkoxy]carbonyl, [(C₁-C₄)alkyl]carbonyl, phenyl, CN and NO₂, and

R² and R³ together with the nitrogen atom (N¹) may form a heterocyclyl radical of 3-6 ring atoms which may be saturated, unsaturated or heteroaromatic and may, in addition to the nitrogen atom (N¹), contain one or two heteroatoms selected from the group consisting of N, O and S and which is unsubstituted or substituted by one or more radicals selected from the group consisting of (C₁-C₆)alkyl, (C₁-C₃)alkoxy, halogen, [(C₁-C₃)alkoxy]carbonyl, (C₁-C₃)haloalkyl and oxo, where the oxo radical is preferably not adjacent to the nitrogen atom (N¹),

R⁴ are halogen, CN, (C₁-C₄)alkyl, (C₁-C₄)alkoxy, (C₂-C₆)alkenyl, (C₂-C₆)alkynyl, (C₃-C₆)alkenyloxy, (C₃-C₆)alkynyloxy,

where each of the 6 last-mentioned radicals is unsubstituted or substituted by one or more radicals selected from the group consisting of halogen,

(C₁-C₆)alkoxy, (C₁-C₆)haloalkoxy, (C₁-C₆)alkylthio, (C₁-C₆)haloalkylthio, (C₁-C₆)alkylsulfinyl, (C₁-C₆)haloalkylsulfinyl, (C₁-C₆)alkylsulfonyl, (C₁-C₆)haloalkylsulfonyl, [(C₁-C₆)alkoxy]carbonyl, [(C₁-C₆)haloalkoxy]carbonyl,

CONR⁶R⁷, SO₂NR⁶R⁷, CN, OH, (C₃-C₆)cycloalkyl, NR⁸R⁹, unsubstituted or substituted phenyl, unsubstituted or substituted heterocyclyl, or

are unsubstituted or substituted, (C₃-C₆)cycloalkyl, unsubstituted or substituted (C₃-C₆)cycloalkenyl, unsubstituted or substituted heterocyclyl having 3 to 6 ring atoms, unsubstituted or substituted phenyl or

[(C₁-C₄)alkyl]carbonyl or [(C₁-C₄)alkoxy]carbonyl, where each of the two last-mentioned radicals is unsubstituted or substituted in the alkyl moiety by one or more halogen atoms, or are radicals of the formula C(O)-NR'-R'', C(S)-NR'-R'', CR'=N-Q¹-R'', NR'-Q¹-R'' or NR'''-N=CR'-R'' where R', R'' and R''' independently of one another are a hydrogen atom, an acyl radical or an

unsubstituted or substituted (C₁-C₁₀)hydrocarbon radical, and Q¹ and Q² independently of one another are a direct bond or a divalent group of the formula -O- or -N(R⁺)-, where R⁺ is a hydrogen atom, an acyl radical or an unsubstituted or substituted (C₁-C₄)alkyl radical and R' together with R" or R⁺ together with R' or R⁺ together with R" may in each case form a heterocyclyl radical having 3 to 6 ring atoms which is unsubstituted or substituted, preferably by one or more radicals selected from the group consisting of halogen, (C₁-C₆)alkyl, (C₁-C₆)alkoxy, [(C₁-C₆)alkoxy]carbonyl, (C₁-C₆)haloalkyl and oxo,

10 I is 0 or 1,

R⁶ and R⁷ independently of one another are H, (C₁-C₄)alkyl, (C₃-C₄)alkenyl, (C₃-C₄)alkynyl or phenyl which is unsubstituted or substituted by one or more radicals selected from the group consisting of halogen, (C₁-C₄)alkyl, (C₁-C₄)haloalkyl, (C₁-C₄)alkoxy, (C₁-C₄)alkylthio, (C₁-C₄)alkylsulfonyl, [(C₁-C₄)alkoxy]carbonyl, CN and NO₂, or

15 R⁶ and R⁷ together with the nitrogen atom of the NR⁶R⁷ group may form a heterocyclyl radical having 5 or 6 ring members which may contain one or more heteroatoms selected from the group consisting of N, O and S and which is unsubstituted or mono- or polysubstituted by radicals selected from the group consisting of (C₁-C₄)alkyl and oxo,

20 R⁸ and R⁹ are (C₁-C₄)alkylcarbonyl, (C₁-C₄)haloalkylcarbonyl,

(C₁-C₄)alkoxycarbonyl or (C₁-C₄)alkylsulfonyl, or together with the nitrogen atom of the NR⁸R⁹ group may form a heterocyclyl radical having 5 or 6 ring members which may contain one or more heteroatoms selected from the group consisting of N, O and S and which is unsubstituted or mono- or polysubstituted by radicals selected from the group consisting of (C₁-C₄)alkyl and oxo.

4. A compound of the formula (I) or a salt thereof as claimed in claim 1 in which
 R^1 is (C₁-C₆)alkyl which is unsubstituted or substituted by one or more radicals
 selected from the group consisting of halogen and (C₁-C₄)alkoxy, or is
 5 3-oxetanyl, (C₃-C₄)alkenyl or (C₃-C₄)alkynyl,
 R^2 is H, (C₁-C₆)alkyl, (C₃-C₆)alkenyl, (C₃-C₆)alkynyl, where each of the three
 last-mentioned radicals is unsubstituted or substituted by one or more radicals
 selected from the group consisting of halogen, (C₁-C₄)alkoxy,
 (C₁-C₄)alkylthio, (C₁-C₄)alkylsulfonyl, [(C₁-C₄)alkoxy]carbonyl,
 10 (C₃-C₆)cycloalkyl, CN and OH, or
 is (C₃-C₆)cycloalkyl which is unsubstituted or substituted by one or more
 radicals selected from the group consisting of halogen, (C₁-C₄)alkyl,
 (C₁-C₄)alkoxy, [(C₁-C₄)alkoxy]carbonyl, CN and OH, or is
 (C₃-C₆)cycloalkenyl, (C₁-C₄)alkoxy, (C₁-C₄)alkenyloxy, (C₁-C₄)alkylamino or
 15 di[(C₁-C₄)alkyl]amino and
 R^3 is H, (C₁-C₆)alkyl, (C₃-C₆)alkenyl, (C₃-C₆)alkynyl, where each of the three
 last-mentioned radicals is unsubstituted or substituted by one or more radicals
 selected from the group consisting of halogen, (C₁-C₄)alkoxy,
 (C₁-C₄)alkylthio, (C₁-C₄)alkylsulfonyl, [(C₁-C₄)alkoxy]carbonyl,
 20 (C₃-C₆)cycloalkyl, CN and OH, or
 is (C₃-C₆)cycloalkyl which is unsubstituted or substituted by one or more
 radicals selected from the group consisting of halogen, (C₁-C₄)alkyl,
 (C₁-C₄)alkoxy, [(C₁-C₄)alkoxy]carbonyl, CN and OH, or is
 (C₃-C₆)cycloalkenyl or
 25 R^2 and R^3 together with the nitrogen atom (N¹) may form a heterocyclyl of 3-6 ring
 atoms which is saturated, unsaturated or heteroaromatic, which may, in

addition to the nitrogen atom (N^1), contain one or two heteroatoms selected from the group consisting of N, O and S and which is unsubstituted or substituted by one or more radicals selected from the group consisting of halogen, (C₁-C₆)alkyl, (C₁-C₃)alkoxy, [(C₁-C₃)alkoxy]carbonyl and oxo, where the oxo radical is preferably not adjacent to the nitrogen atom (N^1), and

R^4 are (C₁-C₄)alkyl, (C₁-C₄)haloalkyl, (C₁-C₄)alkoxy or halogen,

I is 0 or 1, preferably 0,

R^5 is H or methyl,

Q is O or NR^* ,

R^* is H or (C₁-C₄)alkyl,

X and Y independently of one another are (C₁-C₄)alkyl, (C₁-C₄)alkoxy, where each of the two last-mentioned radicals is unsubstituted or substituted by one or more halogen atoms, or are (C₁-C₄)alkylthio, halogen or mono- oder

di[(C₁-C₂)alkyl]amino, and

W is an oxygen atom.

5. A compound of the formula (I) or a salt thereof as claimed in claim 1 in which

R^1 is (C₁-C₃)alkyl, allyl or propargyl,

R^2 is H, (C₁-C₄)alkyl, (C₃-C₅)alkenyl, (C₃-C₅)alkynyl, (C₃-C₆)cycloalkyl or (C₃-C₆)cycloalkenyl,

R^3 is H, (C₁-C₄)alkyl, (C₃-C₅)alkenyl, (C₃-C₅)alkynyl, (C₃-C₆)cycloalkyl or (C₃-C₆)cycloalkenyl, or

R^2 and R^3 together with the nitrogen atom (N^1) may form a heterocyclyl of 3-6 ring atoms which is saturated, unsaturated or heteroaromatic, which may, in addition to the nitrogen atom (N^1), contain one or two heteroatoms selected

from the group consisting of N, O and S and which is unsubstituted or substituted by one or more (C₁-C₆)alkyl radicals,

R⁴ are (C₁-C₃)alkyl or halogen,

I is 0 or 1, preferably 0,

5 Q is O or NR*,

R* is (C₁-C₃)alkyl,

X is (C₁-C₂)alkyl, (C₁-C₂)alkoxy, (C₁-C₂)alkylthio, (C₁-C₂)haloalkyl or (C₁-C₂)haloalkoxy,

Y is (C₁-C₂)alkyl, (C₁-C₂)alkoxy, halogen, NHCH₃ or N(CH₃)₂,

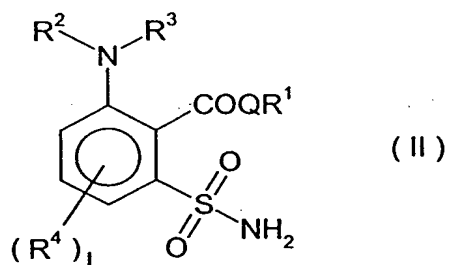
10 V is CH or N, preferably N and

Z is CH or N.

6. A process for preparing compounds of the formula (I) or salts thereof as defined in claim 1 which comprises

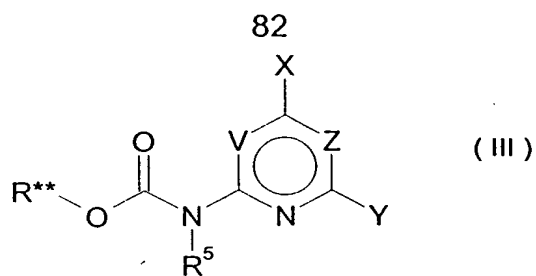
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a) reacting a compound of the formula (II)



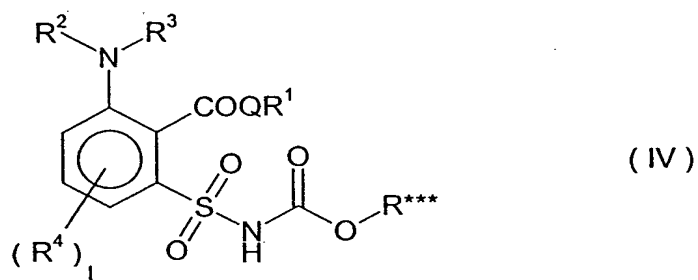
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with a heterocyclic carbamate of the formula (III),

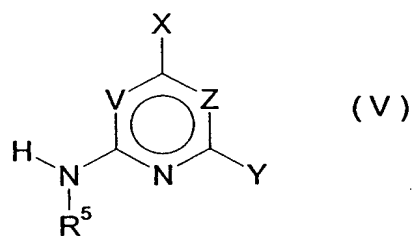


in which R** is a substituted or unsubstituted C₁-C₂₀-hydrocarbon radical, or

b) reacting a sulfonylcarbamate of the formula (IV),

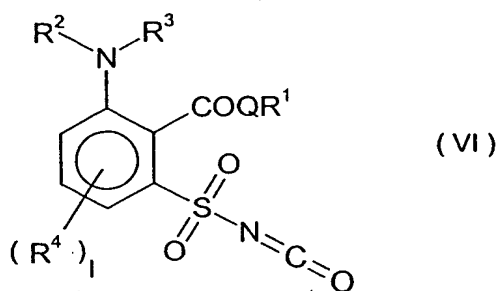


in which R*** is a substituted or unsubstituted C₁-C₂₀-hydrocarbon radical
with an amino heterocycle of the formula (V)



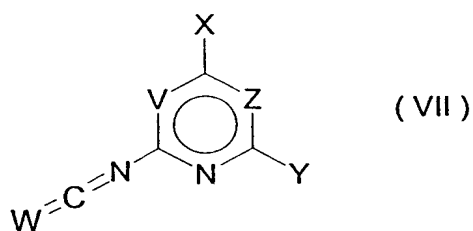
or

c) reacting a sulfonyl isocyanate of the formula (VI)



with an amino heterocycle of the formula (V) or

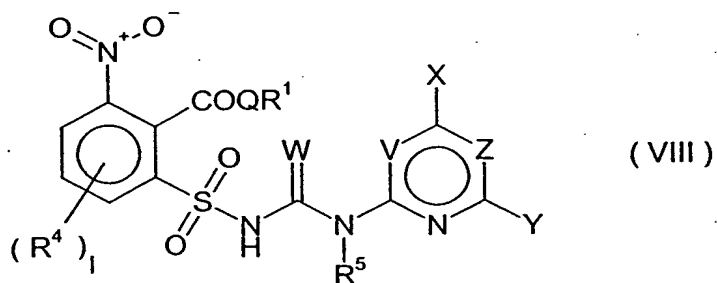
- d) reacting a sulfonamide of the formula (II) with a (thio)isocyanate of the formula (VII)



in the presence of a base or

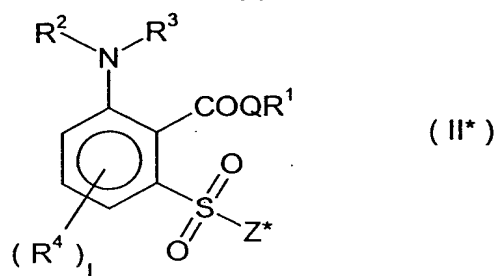
- e) reacting an amino heterocycle of the formula (V) initially under base catalysis with a carbonic ester and reacting the resulting intermediate in a one-pot reaction with a sulfonamide of the formula (II) (see variant a), or

- f) reacting a phenylsulfonyl urea of the formula (VIII)



by reduction of the nitro group and, if appropriate, further conversion of the hydroxylamine or amine function that is released to give a sulfonyl urea of the formula (I),

- 5 where in the formulae (II)-(VIII) the radicals, groups and indices R^1 - R^5 , Q, V, W, X, Y, Z and I are as defined in formula (I) of claim 1.
7. A herbicidal or plant-growth-regulating composition, comprising a) at least one compound of the formula (I) or a salt thereof as claimed in claim 1 and b) formulation
10 auxiliaries which are customary in crop protection.
8. A method for controlling harmful plants or for regulating the growth of plants, which comprises applying an effective amount of at least one compound of the formula (I) or a salt thereof as claimed in claim 1 to the harmful plants or plants, to
15 their plant seeds or to the area on which they grow.
9. The use of the compounds of the formula (I) or their salts as claimed in claim 1 as herbicides or plant growth regulators.
- 20 10. The use as claimed in claim 9, where the compounds of the formula (I) or their salts are employed for controlling harmful plants or for regulating the growth in crops of useful or ornamental plants.
11. The use as claimed in claim 10, where the crop plants are transgenic crop
25 plants.
12. A compound of the formula (II*)



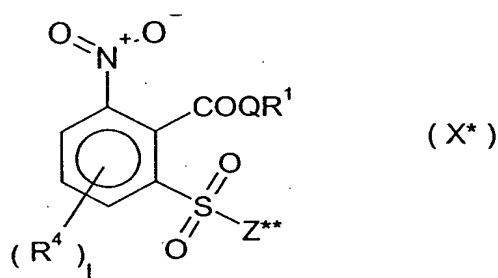
in which $Z^* = \text{NH}_2, \text{NHCOOR}^{***}, \text{NCO}$ or NH-tert-butyl and R^1, R^4, I and Q are as defined in formula (I) of claim 1 and R^{***} is as defined in formula (IV) of claim 6.

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13. The use of a compound of the formula (II*) as defined in claim 12 for preparing a compound of the formula (I) as claimed in claim 1.

14. A compound of the formula (X*)

10



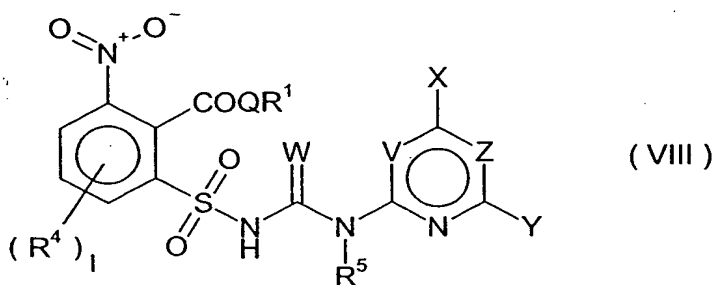
in which $Z^{**} = \text{NH}_2, \text{NHCOOR}^{***}, \text{NH-tert-butyl}$ or Cl and R^1, R^4, I and Q are as defined in formula (I) of claim 1 and R^{***} is as defined in formula (IV) of claim 6, except for compounds in which $Z^{**} = \text{Cl}, I = 0, Q = \text{O}$ and $R^1 = \text{H, methyl, ethyl or allyl}$.

15

15. The use of a compound of the formula (X*) as defined in claim 14 in which Z^{**} is $\text{NH}_2, \text{NHCOOR}^{***}$ or NH-tert-butyl and R^{***} is as defined in formula (IV) of claim 6 for preparing a compound of the formula (II*) as defined in claim 12 in which Z^* is $\text{NH}_2, \text{NHCOOR}^{***}$ or NH-tert-butyl .

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16. A compound of the formula (VIII)



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in which R^1 , R^4 , R^5 , Q, V, W, X, Y, Z and I are as defined in formula (I) of claim 1.

17. The use of a compound of the formula (VIII) as defined in claim 16 for preparing a compound of the formula (I) as defined in claim 1.

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